LPG – CNG PRODUCT CATALOGUE

2024

railgroup.it

CONTENTS

About us 04

Mission & Vision 05

Research & Development 06

Rail world presence 10

Our achievements 12

Products 14

Product specifications 16

Technical information 18

Customized products 20

Key to symbols 21

Injectors for LPG-CNG applications 22

LPG-CNG injectors for heavy duty vehicles - high pressure 34

Range of reducers-filters-accessories 38

ABOUT US

RAIL was established in 2006 with the core business of designing, manufacturing and marketing injectors for LPG/CNG systems in the automotive industry.

The founders, Luigi Stevani and Rocco Grossi, had already acquired experience and specific technical skills in designing such components.

Today, the company employs a dynamic and specialized workforce able to provide customers with an all-round service, from pre-sale consulting support to the proposal of customized solutions.

Professionalism and on-going commitment are the distinctive features of RAIL, together with high-level technical assistance, always tailored to the customers' requirements.

RAIL uses leading-edge equipment to manufacture its components, in full compliance with the quality and safety standards in force in the industry.

Over the years, RAIL has constantly broadened its range by adding new injector models, becoming established in over 30 countries throughout the world.

Thanks to on-going investments in research and development, RAIL now aims to increase the quality of its products still further, thereby confirming its standing with customers as a dependable and innovative partner.

MISSION & VISION

* **OUR MISSION**
RAIL undertakes to design, manufacture and market top-quality, highly reliable components for LPG and CNG systems, thereby offering leading-edge solutions thanks to on-going innovation, research and development. Anticipate the needs of an evolving market and provide all-round customer support are our goals.

* **OUR VISION**
To become leader and international point of reference for the supply of components for LPG and CNG systems thanks to our on-going commitment to technological innovation, process optimization and customer satisfaction. To be recognized for the high quality of our products, result of time-tested skills and a constant drive for new solutions.

Professionalism and on-going commitment are the distinctive features of Rail

RESEARCH & DEVELOPMENT

Our technical workshop and quality department are outfitted with the most modern equipment and are staffed with technicians constantly committed to improving the production processes. We focus on advanced automation at every stage, from design to creation of the finished product.

Thanks to investments in innovative solutions, our product engineering department has achieved remarkable increases in efficiency during the injector calibration and final inspection stages.

Pursuing excellence by implementing state-of-the-art technologies to guarantee the top-most quality standards is our goal.
Our search for technical perfection drives us towards ongoing development targeted on providing our customers with top-quality products.

OUR TECHNICAL OFFICE

Our technical office is the beating heart of RAIL innovation.

Our goal is always to anticipate the requirements of our customers and the market by proposing leading edge products.

CONSULTANCY

Our experts are on hand to assist our customers at every stage, from choice of the most suitable solution, through to installation and after-sale care.

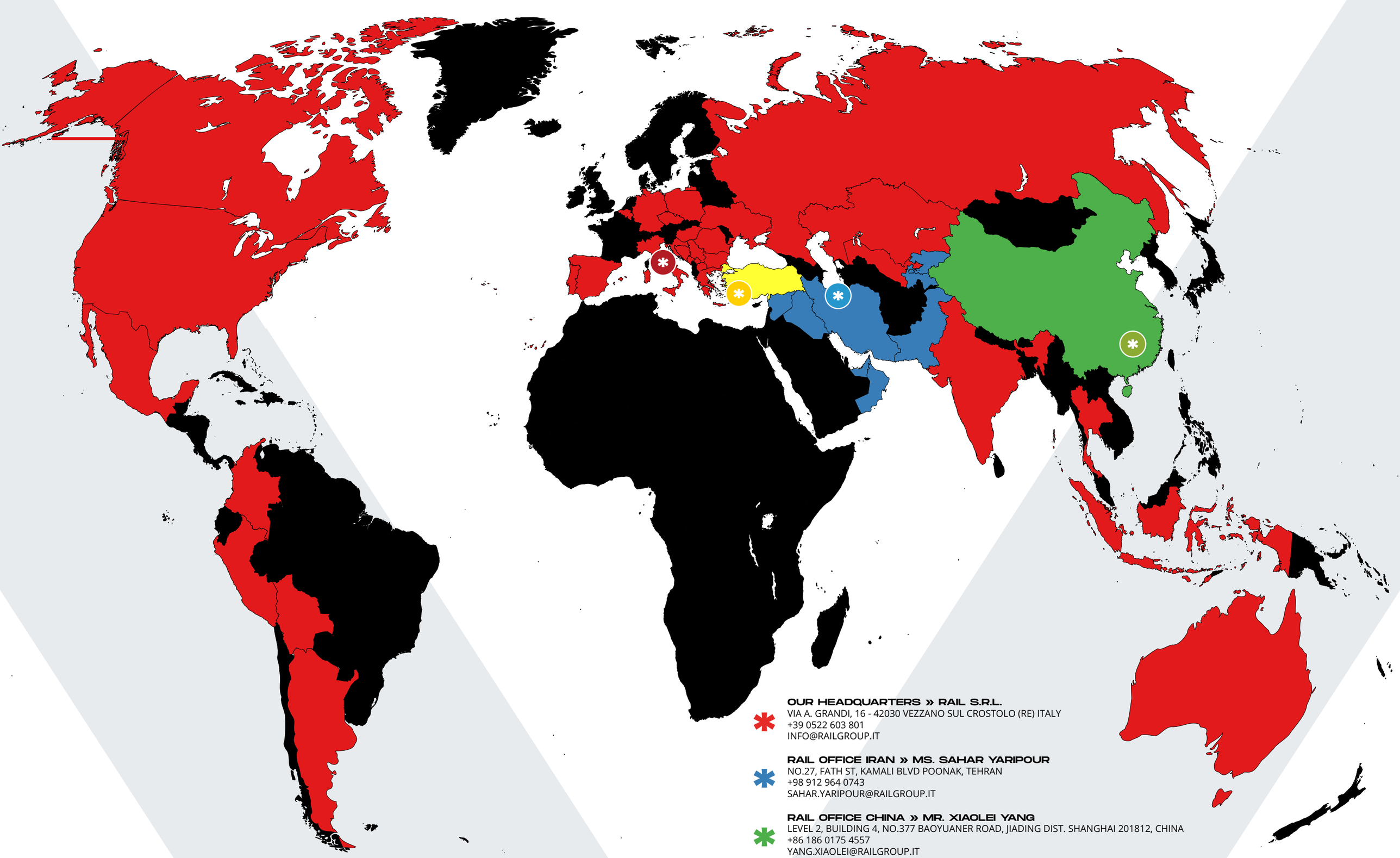
CUSTOMIZING

We design solutions tailored to suit the customers' needs. Our technical office can customize our products as required.

AFTER-SALES ASSISTANCE

A prompt and qualified assistance service for full customer satisfaction. Our technicians are ready to act quickly in every situation.

The essence of innovation



OUR HEADQUARTERS » RAIL S.R.L.
VIA A. GRANDI, 16 - 42030 VEZZANO SUL CROSTOLO (RE) ITALY
+39 0522 603 801
INFO@RAILGROUP.IT

RAIL OFFICE IRAN » MS. SAHAR YARIPOUR
NO.27, FATH ST, KAMALI BLVD POONAK, TEHRAN
+98 912 964 0743
SAHAR.YARIPOUR@RAILGROUP.IT

RAIL OFFICE CHINA » MR. XIAOLEI YANG
LEVEL 2, BUILDING 4, NO.377 BAOYUANER ROAD, JIADING DIST. SHANGHAI 201812, CHINA
+86 186 0175 4557
YANG.XIAOLEI@RAILGROUP.IT

RAIL OFFICE TURKEY » MS. HAVVA ÇETİN
I FEVZI ÇAKMAK MAH. 10721 SK. D BLOK NO: 22/D 42050 KARATAY KONYA TURKEY
+90 538 870 7246
HAVVA.CETIN@RAILGROUP.IT

OUR ACHIEVEMENTS

RAIL has now been in the business for over 17 years and throughout that time has always displayed a constant capacity for growth and innovation, as testified by the goals attained year by year.

From supplying international markets in 2014 to improving the performance of products like the IGI Apache HD injector, through to the development of new lines such as the Tyrion reducer and revolutionary IG4 Dakota OEM injector.

Ongoing investments in research and development have led to an expansion of our product range and enabled us to penetrate new segments of the market, as evidenced by our entrance into the CNG and LNG reducer sector.

Our strive towards innovation and to improve our production processes is what drives the irrepressible development of RAIL in its endeavour to become a leading player in its particular sector.

2014 We supply IG1, IG1 Apache injectors to Chinese OEMs

2014 IG1 Apache HD/ IG1 2014: increased product lifespan and reliability, with a consequently longer warranty period

2016 IG1 Apache HD injectors last over 150,000 km in a group of taxis in Thailand, without requiring any maintenance

2016 IG1 Apache HD/ IG1 2014: no complaints about performance or lifespan since 2014

2016 RAIL celebrates its tenth anniversary

2017 IG7 Dakota reaches 1 billion cycles in laboratory endurance tests

2019 3,620,000 of 4- ,3- and 2-cylinder injectors sold between 2006 and December 2019

2019 IG7 Dakota: All-time minimum number of complaints from the field

2020 Production of the Tyrion CNG reducer begins

2021 Beginning of production of the IG4 Dakota AM and OEM injector and development of the LNG Greener reducer

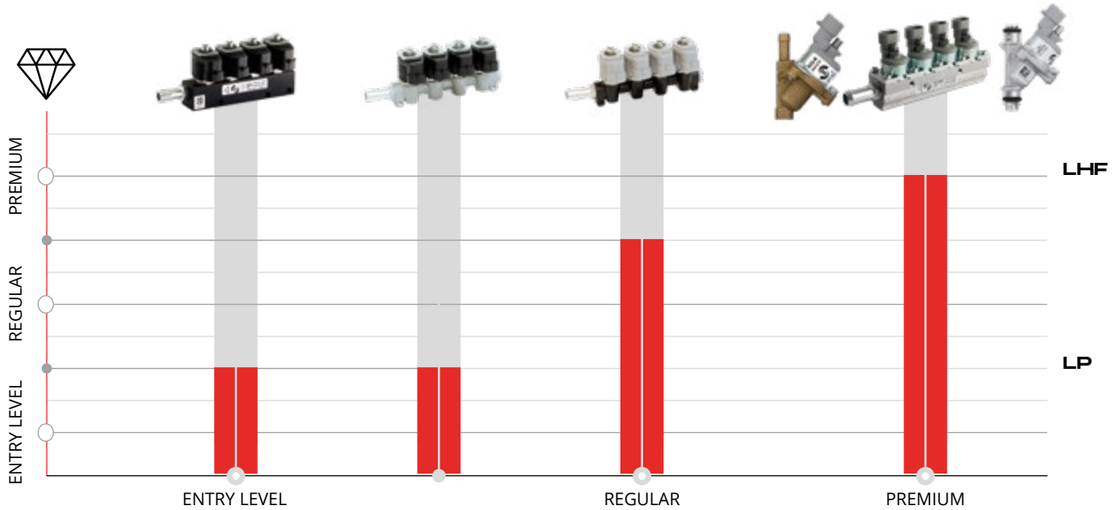
2023 ISO 15500 CERTIFICATESon in India for IG4, IG7 and LNG Greener

2024 Work in progress, new products and new solutions

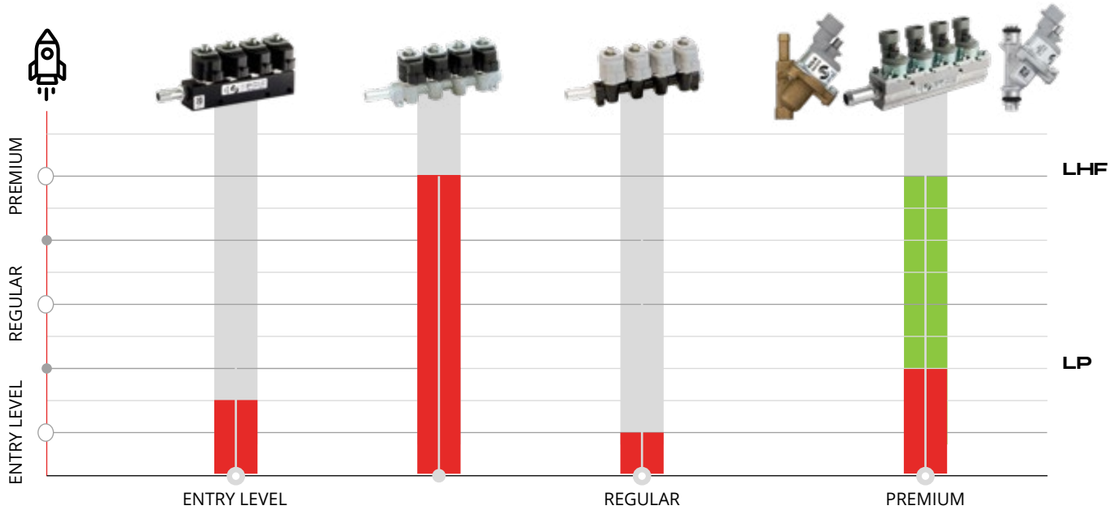
Our products

PRODUCT SPECIFICATIONS

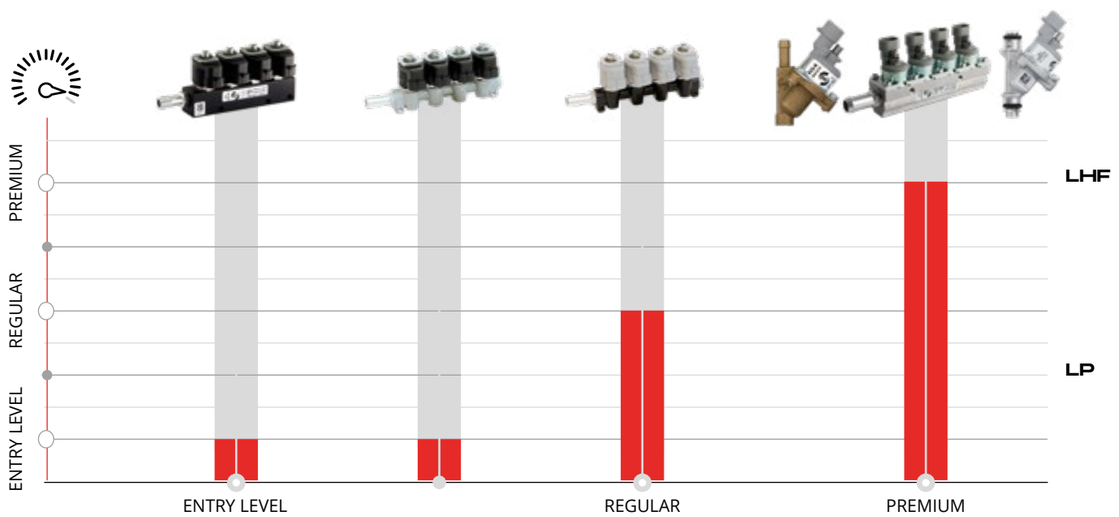
LIFESPAN



POWER HANDLING CAPABILITY



SPEED



TECHNICAL INFORMATION

OEM	IG7 DAKOTA			IG4 DAKOTA OEM		
	LP		LHF	LP		LHF
	1 Ohm / 2 Ohm		2 Ohm	1 Ohm / 2 Ohm		2 Ohm
FUEL TYPE ON APPLICATION	LPG - CNG			LPG - CNG		
OPENING TIME (ms)	1.4	1.7	1.8	1.4	1.7	1.8
MAX POWER FOR LPG 1 BAR (kW)	28/Cyl.	33/Cyl.	43/Cyl.	28/Cyl.	33/Cyl.	43/Cyl.
MAX POWER FOR CNG 2 BAR (kW)	25/Cyl.	29/Cyl.	38/Cyl.	25/Cyl.	29/Cyl.	38/Cyl.
DURABILITY	1 Billion		700 Million	1 Billion		700 Million

Technical features of injectors for the application: oem, 0 km, passenger vehicles, bi-fuel or monofuel, light commercial vehicles, direct injection engine

HEAVY DUTY	IG6 POTOMAC		IG6 TAURUS II		IG7 DAKOTA HP	IG4 DAKOTA "8L"	
	Coil Resistance 1,5 Ohm	Coil Resistance 4,7 Ohm	Coil Resistance 1,5 Ohm	Coil Resistance 4,7 Ohm	2 Ohm	Coil Resistance 1 Ohm	Coil Resistance 4,7 Ohm
FUEL TYPE ON APPLICATION	CNG		CNG		CNG	CNG	
OPENING TIME (ms)	2.15	2.1	2.4	2.4	1.9	2.7	
MAX FLOW RATE	15.2 Kg/h	15.2 Kg/h	18 Kg/h x Cyl.	18 Kg/h x Cyl.	17 Kg/h x Cyl.	31.1 Kg/h x Cyl.	
N° OF CYLINDER	1 SINGLE		3, 4, 5 AND 6		2, 3 AND 4	1 SINGLE	
DURABILITY	500 Million		500 Million		500 Million	500 Million	
MAX PRESSURE RANGE	5 / 9	5 / 9	5 / 9	5 / 9	7	8	

Technical features of injectors for the application: heavy duty multi point&single point inj. ; bus, truck, industrial engine, generators (stationary engine)

AFTER MARKET	IG1		IG1 APACHE		IG1 APACHE HD	IG7 DAKOTA		IG4 AFTER MARKET VERSION	
						LP Version	LHF Version	LP Version	LHF Version
	For 2 Ohm	For 3 Ohm	For 2 Ohm	For 3 Ohm	Only 2 Ohm Available	Only 2 Ohm Available		Only 2 Ohm Available	
FUEL TYPE ON APPLICATION	LPG / CNG		LPG / CNG		LPG / CNG	LPG / CNG		LPG / CNG	
OPENING TIME (ms)	2.8	3.2	2.8	3.2	2.5	1.7	1.8	2	2.1
POWER RANGE FOR LPG 1 BAR (kW)	From 11 to 33 kW/per cylinder		From 11 to 37 kW/per cylinder		From 11 to 30 kW/per cylinder	From 12 to 33 kW/per cylinder	From 11 to 43 kW/per cylinder	From 12 to 33 kW/per cylinder	From 11 to 43 kW/per cylinder
POWER RANGE FOR CNG 2 BAR (kW)	From 11 to 29 kW/per cylinder		From 11 to 33 kW/per cylinder		From 11 to 25 kW/per cylinder	From 10 to 29 kW/per cylinder	From 10 to 38 kW/per cylinder	From 10 to 29 kW/per cylinder	From 10 to 38 kW/per cylinder
DURABILITY	250 million cycles		250 million cycles		500 million cycles	1 billion cycles	700 million cycles	1 billion cycles	700 million cycles
SEGMENT	ENTRY LEVEL		ENTRY-MEDIUM LEVEL		MEDIUM LEVEL	HIGH LEVEL		HIGH LEVEL	

Basic technical features of injectors for the application: bi-fuel, passenger vehicles & light commercial vehicles - multipoint injection - direct injection engine

CUSTOMIZED PRODUCTS

We tailor our injectors to the customers' specific requirements. Backed by the know-how acquired by our technical staff members and the ongoing progress of our production processes, we are able to provide products customized down to the smallest detail.

We can customize the logo by laser engraving to make the product unique and distinctive.

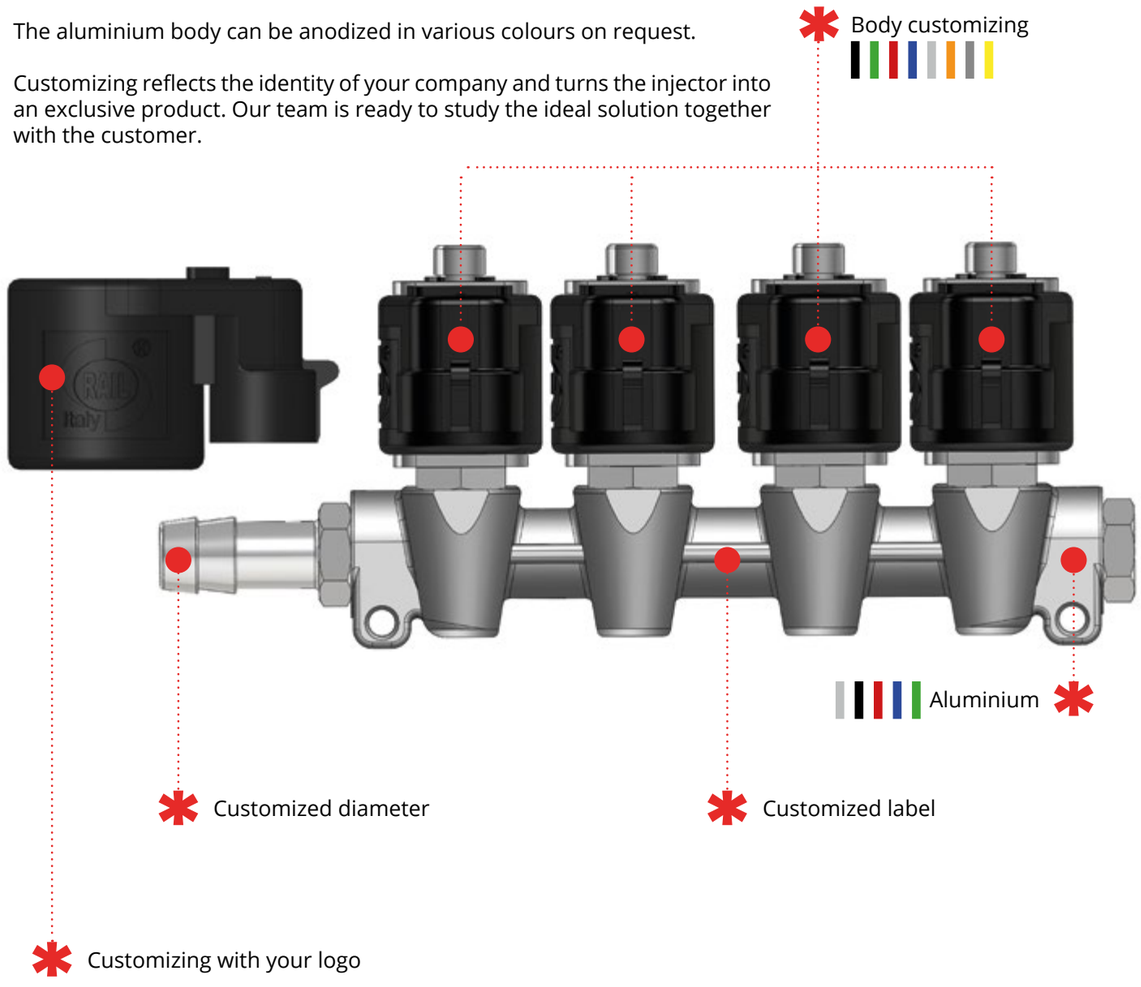
The customer can also have the coil customized with a chosen colour and trademark.

The inlet diameter of the injector can be modified on request.

The customer can choose the trademark and colour on the label to create a signature product.

The aluminium body can be anodized in various colours on request.

Customizing reflects the identity of your company and turns the injector into an exclusive product. Our team is ready to study the ideal solution together with the customer.



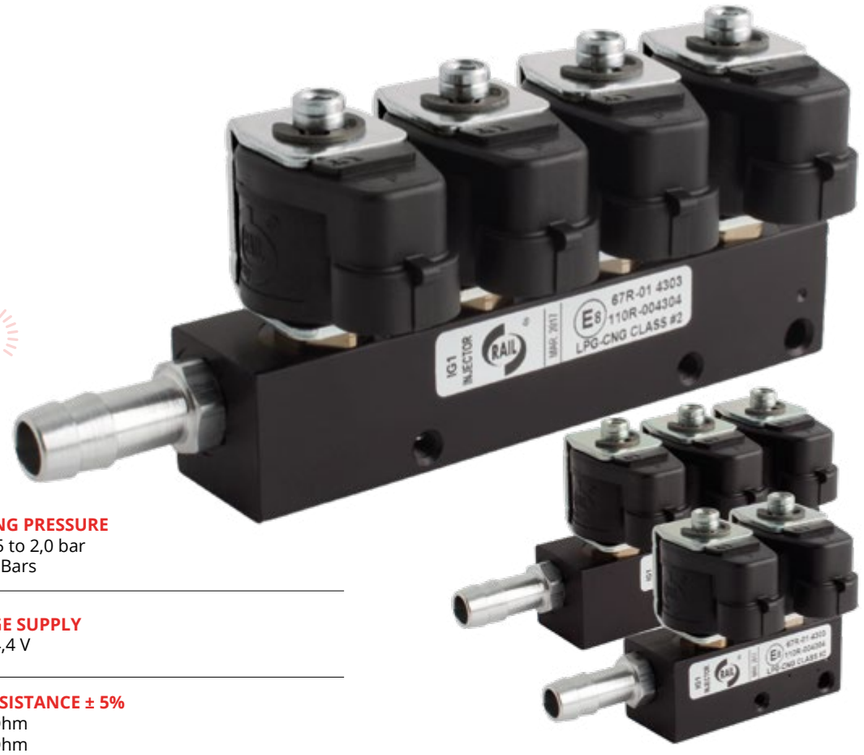
KEY TO SYMBOLS

	High performance		Description
	Average performance		Accessories
	Technological injector	AI	Aluminium
	Basic cost	Pm	Polymeric material
	Normal cost	CuZn	Brass
	High cost	FeC	Steel

INJECTORS FOR LPG – CNG APPLICATIONS

IG1
OLD

AI



WORKING PRESSURE
From 0,5 to 2,0 bar
Max 3,0 Bars

VOLTAGE SUPPLY
10,8 - 14,4 V

COIL RESISTANCE ± 5%
A2 2,0 Ohm
A3 3,0 Ohm

GAS INLET FITTING DIAMETER
Rubber hose D. 10mm/12mm
(D. 14mm/16mm available on request)

GAS OUTLET FITTING DIAMETER
Calibrated nozzles M8x1 for rubber hose D.6mm
(D. 4mm/5mm available on request)

HOLE CALIBRATION RANGE
1,0 - 3,25 mm (0,25mm step)

POWER HANDLING CAPABILITY
LPG 1 bar 45HP/Cyl
CNG 2 bars 40HP/Cyl

TEMPERATURE RANGE
LPG -20° / +120°C
CNG -40° / +120°C

CERTIFICATES
67R-01 / 110R-00 / ISO 15500

MAIN FEATURE
TRIED-AND-TESTED INJECTOR

MAIN FEATURE
AVAILABLE IN THE 0.45 MM STROKE VERSION

M5 temperature sensor

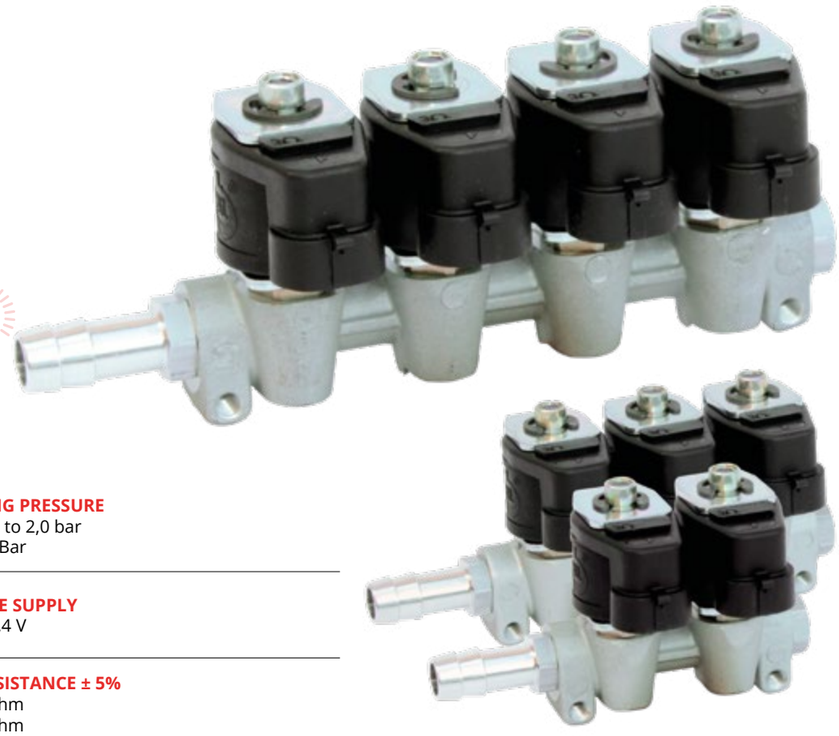
Sensata pressure and temperature sensor

Fastening bracket

DATA SHEET

IG1
APACHE

AI



WORKING PRESSURE
From 0,5 to 2,0 bar
MAX 3,0 Bar

VOLTAGE SUPPLY
10,8 - 14,4 V

COIL RESISTANCE ± 5%
A2 2,0 Ohm
A3 3,0 Ohm

GAS INLET FITTING DIAMETER
Rubber hose D. 10mm/12mm
(D. 14mm/16mm available on request)

GAS OUTLET FITTING DIAMETER
Calibrated nozzles M8x1 for rubber hose D.6mm
(D. 4mm/5mm available on request)

HOLE CALIBRATION RANGE
1,0 - 3,25 mm (0,25mm step)

POWER HANDLING CAPABILITY
LPG 1 bar 63HP/Cyl
CNG 2 bars 52HP/Cyl

TEMPERATURE RANGE
LPG -20° / +120°C
CNG -40° / +120°C

CERTIFICATES
67R-01 / 110R-00 / ISO 15500

MAIN FEATURE
HIGH POWER HANDLING CAPABILITY

MAIN FEATURE
STYLIZED BODY

M5 temperature sensor

Sensata pressure and temperature sensor

Fastening bracket

DATA SHEET

IG1
APACHE HD

AI

	WORKING PRESSURE From 0,5 to 2,0 bar MAX 3,0 Bars
	VOLTAGE SUPPLY 10,8 - 14,4 V
	COIL RESISTANCE ± 5% **A2** 2,0 Ohm
	GAS INLET FITTING DIAMETER Rubber hose D. 10mm/12mm (D. 14mm/16mm available on request)
	GAS OUTLET FITTING DIAMETER Calibrated nozzles M8x1 for rubber hose D.6mm (D. 4mm/5mm available on request)
	HOLE CALIBRATION RANGE 1,0 - 2,75 mm (0,25mm step)
	POWER HANDLING CAPABILITY LPG 1 bar 45HP/Cyl CNG 2 bars 40HP/Cyl
	TEMPERATURE RANGE LPG -20° / +120°C CNG -40° / +120°C
	CERTIFICATES 67R-01 / 110R-00 / ISO 15500
	MAIN FEATURE **MEDIUM RATE INJECTOR**
	MAIN FEATURE **STAINLESS STEEL MECHANICAL COMPONENTS**

M5 temperature sensor

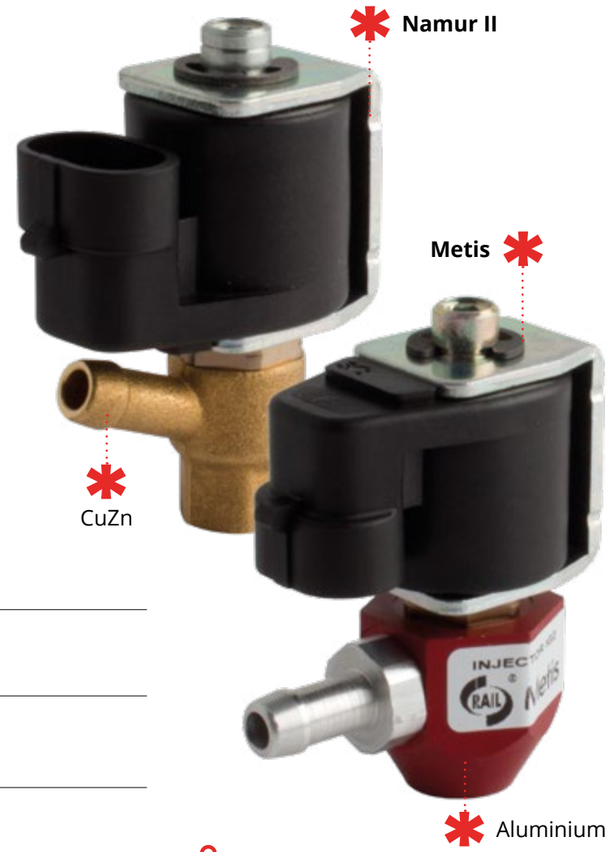
Sensata pressure and temperature sensor

Fastening bracket

DATA SHEET

IG2

ALSO AVAILABLE
IN THE “HD” VERSION



	WORKING PRESSURE From 0,5 to 2,0 bar MAX 3,0 Bars
	VOLTAGE SUPPLY 10,8 - 14,4 V
	COIL RESISTANCE ± 5% **A2** 2,0 Ohm **A3** 3,0 Ohm
	GAS INLET FITTING DIAMETER On Manifold Rubber hose D. 12mm
	GAS INLET FITTING DIAMETER From Manifold to injector inlet Rubber hose D.7mm
	GAS OUTLET FITTING DIAMETER Calibrated nozzles M8x1 for rubber hose D.6mm (D. 4mm/5mm available on request)
	HOLE CALIBRATION RANGE 1,0 - 3,25 mm (0,25mm step)
	POWER HANDLING CAPABILITY LPG 1 bar 50HP/Cyl CNG 2 bars 45HP/Cyl
	TEMPERATURE RANGE LPG -20° / +120°C CNG -20° / +120°C
	CERTIFICATES 67R-01 / 110R-00
	MAIN FEATURE **SINGLE INJECTOR**

Manifold

Sensata pressure and temperature sensor

DATA SHEET

IG4
DAKOTA AFTER MARKET

CuZn

WORKING PRESSURE
From 0,5 to 3,0 bar
MAX 4,5 Bars

VOLTAGE SUPPLY
10,8 - 14,4 V

COIL RESISTANCE ± 5%
E2 2,0 Ohm

GAS INLET FITTING DIAMETER
Rubber hose D. 6mm/8mm

GAS OUTLET FITTING DIAMETER
Calibrated nozzles M8x1
for rubber hose D.6mm

HOLE CALIBRATION RANGE
LP 1,0 - 2,75 mm (0,25mm step)
LHF 1,0 - 3,50 mm (0,25mm step)

POWER HANDLING CAPABILITY
LP LPG 1 bar 40HP/Cyl LHF LPG 1 bar 60HP/Cyl
LP CNG 2 bar 35HP/Cyl LHF CNG 2 bar 50HP/Cyl

TEMPERATURE RANGE
LPG -40° / +120°C
CNG -40° / +120°C

CERTIFICATES
67R-01 / 110R-00

LHF

LP

DATA SHEET

IG4
DAKOTA OEM

Al

WORKING PRESSURE
From 0,5 to 3,0 bar
MAX 4,5 Bars

VOLTAGE SUPPLY
10,8 - 14,4 V

COIL RESISTANCE ± 5%
E2 2,0 Ohm

GAS INLET FITTING DIAMETER
Installation on common rail

GAS OUTLET FITTING DIAMETER
Installation on engine manifold

HOLE CALIBRATION RANGE
LP 1,0 - 3,00mm (0,25mm step)
HP 1,0 - 1,75mm (0,25mm step)
LHF use without nozzles

POWER HANDLING CAPABILITY
LP LPG 1 bar 40HP/Cyl LHF LPG 1 bar 60HP/Cyl
LP CNG 2 bar 35HP/Cyl LHF CNG 2 bar 50HP/Cyl

TEMPERATURE RANGE
LPG -40° / +120°C
CNG -40° / +120°C

CERTIFICATES
67R-01 / 110R-00 / ISO 15500

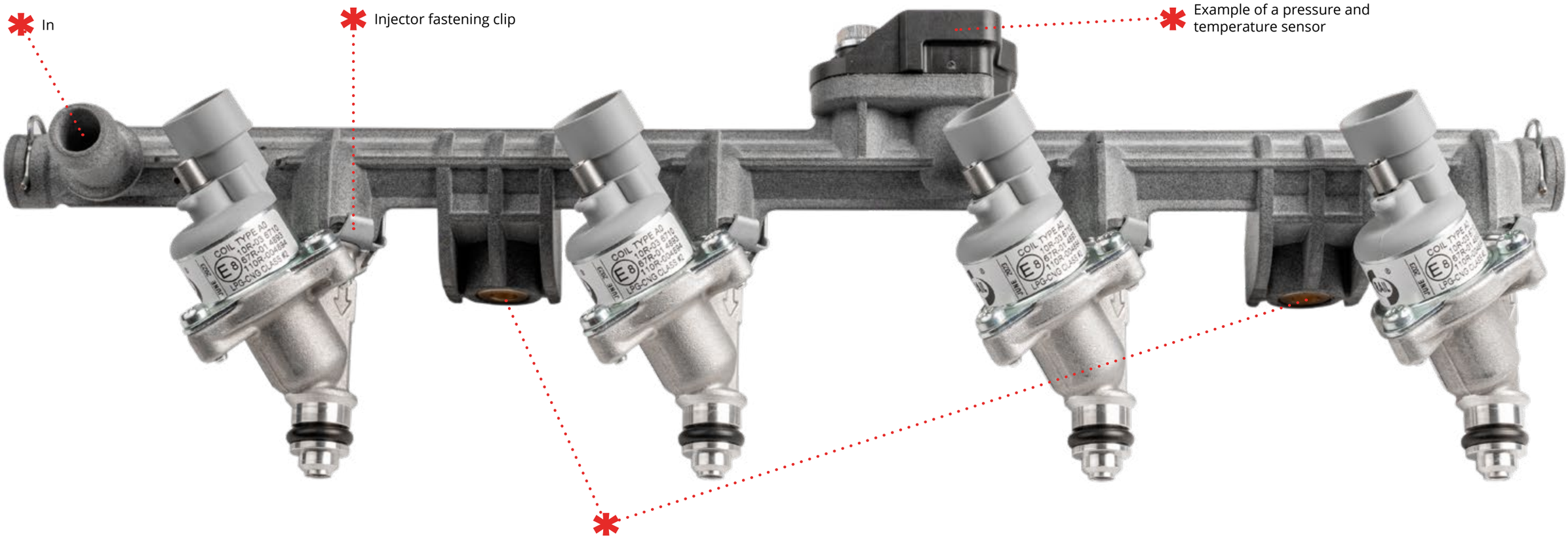
LP

LHF

HP

DATA SHEET

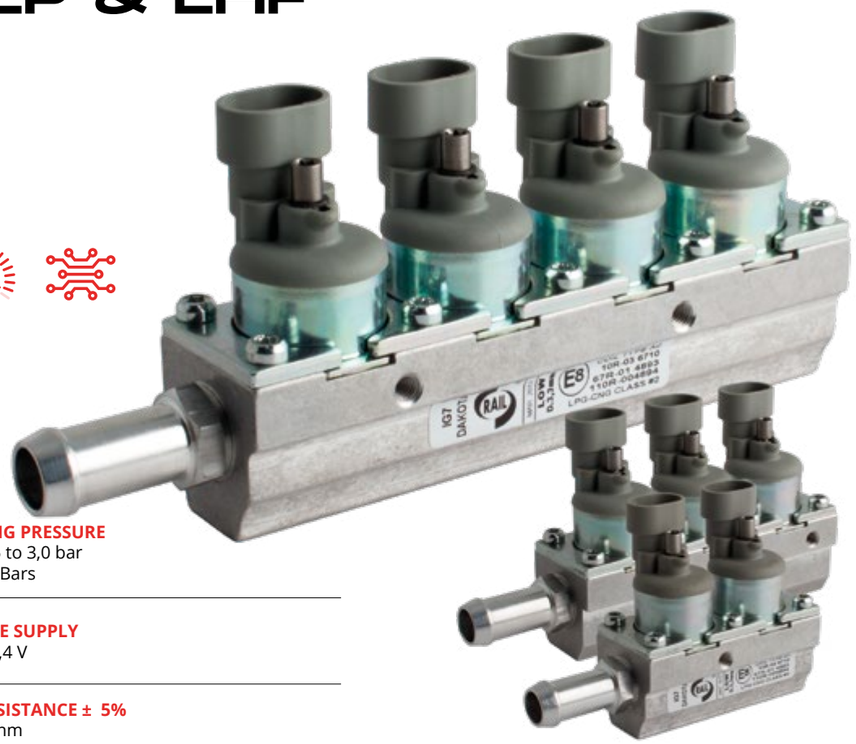
IG4
OEM COMMON RAIL



IF REQUESTED BY THE CUSTOMER, RAIL CAN DEVELOP SPECIFIC SOLUTIONS FOR
COMPLETE INJECTOR + COMMON RAIL + SENSOR UNITS

IG7
DAKOTA LP & LHF

AI



WORKING PRESSURE
From 0,5 to 3,0 bar
MAX 4,5 Bars

VOLTAGE SUPPLY
10,8 - 14,4 V

COIL RESISTANCE ± 5%
E2 2,0 Ohm

GAS INLET FITTING DIAMETER
Rubber hose D. 10mm/12mm
(D.14mm/16mm available on request)

GAS OUTLET FITTING DIAMETER
Calibrated nozzles M8x1
for rubber hose D.6mm

HOLE CALIBRATION RANGE
LP 1,0 - 3,25 mm (0,25mm step)
LHF 1,0 - 3,50 mm (0,25mm step)

POWER HANDLING CAPABILITY
LP LPG 1 bar 40HP/Cyl LHF LPG 1 bar 60HP/Cyl
LP CNG 2 bar 35HP/Cyl LHF CNG 2 bar 50HP/Cyl

TEMPERATURE RANGE
LPG -40° / +120°C
CNG -40° / +120°C

CERTIFICATES
67R-01 / 110R-00 / ISO 15500

Fastening bracket

Sensata pressure and
temperature sensor

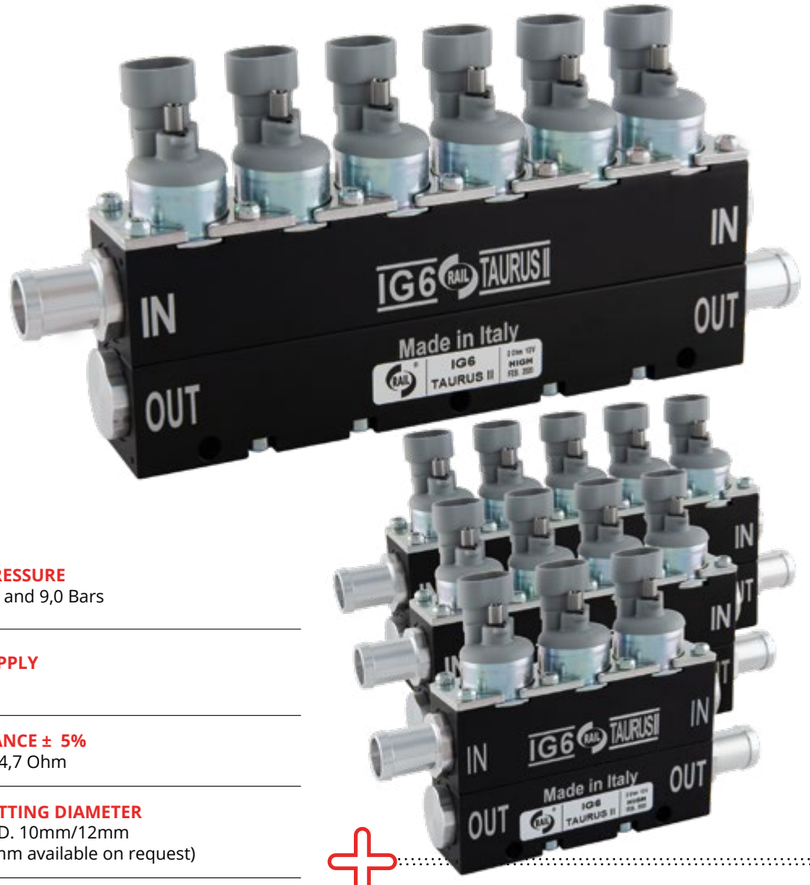
LP LHF

DATA SHEET

LPG – CNG INJECTORS FOR HEAVY-DUTY VEHICLES HIGH PRESSURE

IG6
TAURUS II

Al



WORKING PRESSURE
Version at 5,0 and 9,0 Bars

VOLTAGE SUPPLY
12V e 24V

COIL RESISTANCE ± 5%
E2 2,0 Ohm / 4,7 Ohm

GAS INLET FITTING DIAMETER
Rubber hose D. 10mm/12mm
(D.14mm/16mm available on request)

TEMPERATURE RANGE
LPG -40° / +120°C
CNG -40° / +120°C

Sensata pressure and temperature sensor

12V HP 2Ohm | 12V LP 2Ohm | 24V HP 4.7Ohm | 24V LP 4.7Ohm

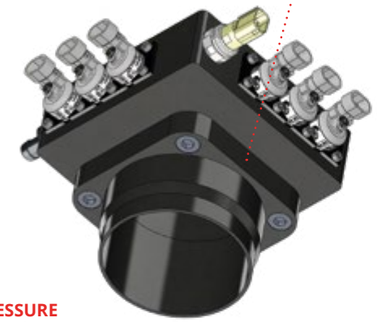
DATA SHEET

Specific injector for converting from Diesel to LPG/CNG in heavy-duty vehicles

IG6
POTOMAC

Example of a mixer

FeC GALVANIZED STEEL BODY



WORKING PRESSURE
Version at 5,0 and 9,0 Bars

VOLTAGE SUPPLY
12V e 24V

COIL RESISTANCE ± 5%
E5 1,5 Ohm / 4,7 Ohm

TEMPERATURE RANGE
LPG -40° / +120°C
CNG -40° / +120°C

CERTIFICATES
110R-00

MAIN FEATURE
CARTRIDGE INJECTOR FOR USE IN CONJUNCTION WITH A MIXER

Sensata pressure and temperature sensor

24V 5 Bar 4.7 Ohm

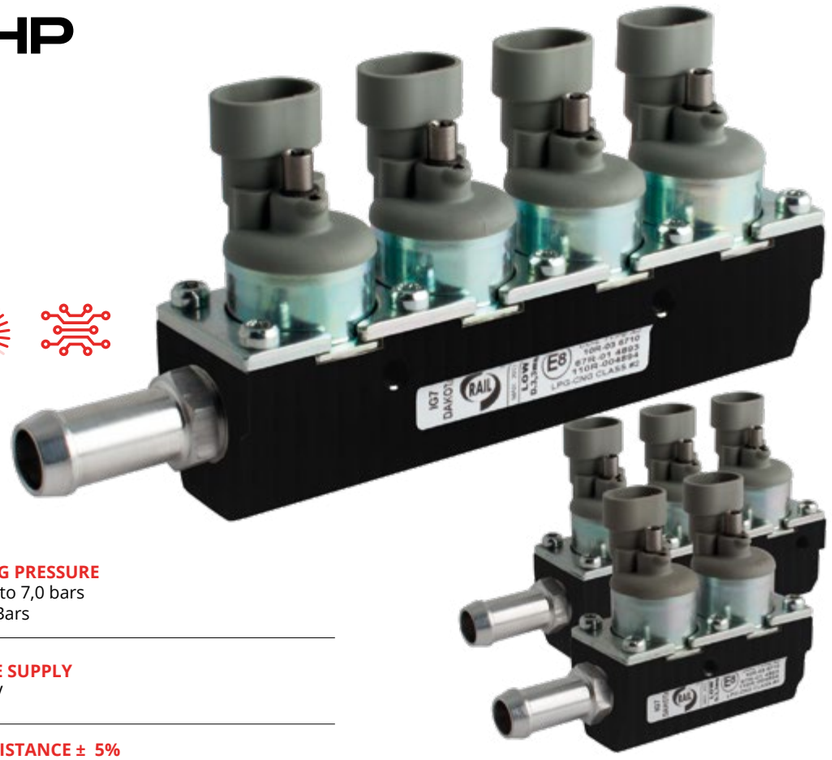
12V 5 Bar 1.5 Ohm

DATA SHEET

Specific injector for converting from Diesel to LPG/CNG in heavy-duty vehicles

IG7
DAKOTA HP

AI



WORKING PRESSURE
From 0,5 to 7,0 bars
MAX 9,0 Bars

VOLTAGE SUPPLY
12V e 24V

COIL RESISTANCE ± 5%
E2 2,0 Ohm / 4,7 Ohm

GAS INLET FITTING DIAMETER
Rubber hose D. 10mm/12mm
(D.14mm/16mm available on request)

GAS OUTLET FITTING DIAMETER
Calibrated nozzles M8x1
for rubber hose D.6mm

HOLE CALIBRATION RANGE
1,0 - 2,0 mm (0,25mm step)

POWER HANDLING CAPABILITY
CNG 7 bar 64HP/Cyl

TEMPERATURE RANGE
CNG -40° / +120°C

CERTIFICATES
110R-00

Sensata pressure and
temperature sensor

Fastening bracket

HP

DATA SHEET

Multipoint injector for high pressure CNG applications

RANGE OF
REDUCERS
FILTERS
ACCESSORIES

GREENER LNG

SINGLE STAGE REDUCER FOR LNG APPLICATIONS SEQUENTIAL INJECTION

AI

Standard version

Version with solenoid valve

WORKING PRESSURE
INLET PRESSURE - From 5 to 25 Bar
NOMINAL OUTLET PRESSURE - From 2 to 9 Bar

VOLTAGE SUPPLY
12 V and 24 V

GAS INLET FITTING DIAMETER
INLET FITTING - 3/8" G ISO228

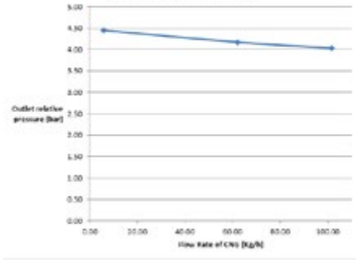
GAS OUTLET FITTING DIAMETER
OUTLET FITTING - 16MM

POWER HANDLING CAPABILITY
LNG up to 350 Kw

TEMPERATURE RANGE
LNG -40° / +120°C

CERTIFICATES
ISO 15500

Outlet Pressure vs Flow Rate @16 bar inlet pressure (4 bar version)



DATA SHEET

TYRION CNG

SINGLE STAGE REDUCER FOR LNG APPLICATIONS SEQUENTIAL INJECTION

AI

WORKING PRESSURE
INLET PRESSURE - From 15 to 200 Bars
NOMINAL OUTLET PRESSURE - From 2 to 8 Bars

VOLTAGE SUPPLY
12 V and 24 V

GAS INLET FITTING DIAMETER
INLET FITTING - M12X1 / 1/4" NPT
UPON REQUEST

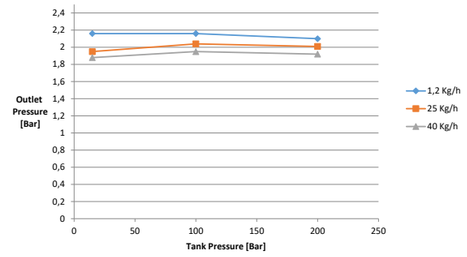
GAS OUTLET FITTING DIAMETER
OUTLET FITTING - 14MM

POWER HANDLING CAPABILITY
CNG up to 250 Kw

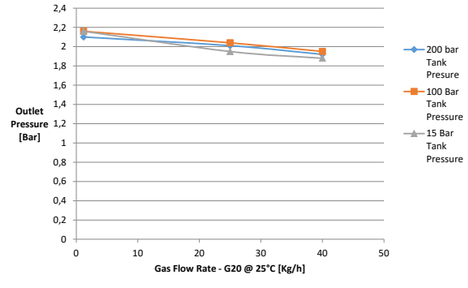
TEMPERATURE RANGE
CNG -40° / +120°C

CERTIFICATES
110R-00 & ISO 15500

Outlet Pressure vs Inlet pressure



Outlet Pressure Vs Flow Rate



DATA SHEET

FILTER FG3

LPG – CNG FILTER GASEOUS PHASE LOW PRESSURE

WORKING PRESSURE
Max 4,5 Bars

GAS INLET FITTING DIAMETER
Rubber hose D. 10mm/12mm/14mm/16mm

TEMPERATURE RANGE
LPG -20° / +120°C
CNG -20° / +120°C

DATA SHEET

FILTER FG4

LPG – CNG FILTER GASEOUS PHASE LOW PRESSURE

WORKING PRESSURE
Max 4,5 Bars

GAS INLET FITTING DIAMETER
Rubber hose D. 12mm

TEMPERATURE RANGE
LPG -40° / +120°C
CNG -40° / +120°C

MAIN FEATURE
ACCESSIBLE FOR INSPECTION

MAIN FEATURE
VORTEX SYSTEM FOR SEPARATING OIL FROM THE GAS

MAIN FEATURE
HOUSING FOR BOSCH OR CONTINENTAL / SIEMENS SENSORS

Spare filter cartridge with O-rings

DATA SHEET

AUS32 APPLICATIONS

FILTERS FOR AUS32 APPLICATIONS

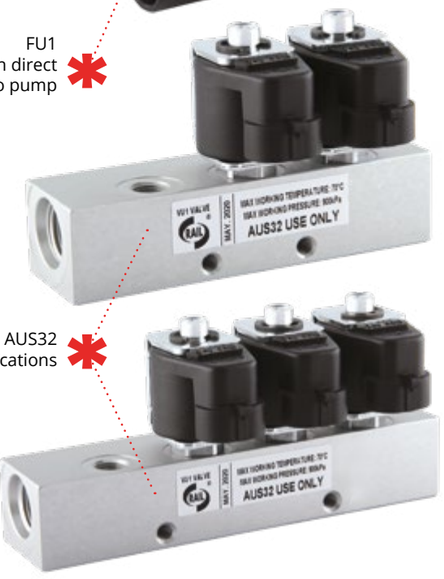
FU1
Filter for AUS32 applications
New filter - developed in response to the new, emerging technology for reducing emissions - that uses AUS32, an aqueous solution containing 30% urea which converts the nitrogen oxides into water and harmless nitrogen.
- Compact size
- Flexible installation
- Connections compliant with SAE J2044 regulations
- EPDM seal material

VU1 VALVE
Valve for AUS32 applications
2-Way VU1 solenoid valve block for AUS32 applications, with outputs for sensors. 12 and 24 Volt ratings available

FU4
Filter for AUS32 applications
New filter - developed in response to the new, emerging technology for reducing emissions - that uses AUS32, an aqueous solution containing 30% urea which converts the nitrogen oxides into water and harmless nitrogen.
- Compact size
- Flexible installation
- Connections compliant with SAE J2044 regulations
- EPDM seal material

FU1
Standard version

FU1
Version with direct connection to pump



Valve for AUS32 applications

Filter for AUS32 applications

VU1 VALVE

FU4 - AUS32 Filter

DATA SHEET

VG6

SOLENOID VALVE FOR LPG APPLICATIONS

WORKING PRESSURE	Max 3 MPa
VOLTAGE SUPPLY	12V DC
COIL RESISTANCE ± 5%	12,3 Ohm
GAS INLET FITTING DIAMETER	M10x1 Female
GAS OUTLET FITTING DIAMETER	M10x1 Female
TEMPERATURE RANGE	LPG -20° / +120°C
CERTIFICATES	ECE 67R-01

Wired cable L=500mm with male connector, AMP Superseal blade receptacle for connecting coils

Fastening bracket

DATA SHEET

LPG THERMOPLASTIC HOSE

EXTRA ACCESSORIES

WORKING PRESSURE	Max working pressure 30 Bars
GAS INLET FITTING DIAMETER	3/16” Internal diameter 4.8 mm 1/4” Internal diameter 6.4 mm
GAS OUTLET FITTING DIAMETER	3/16” External diameter 9.2 mm 1/4” External diameter 10.8 mm
TEMPERATURE RANGE	LPG -40° / +125°C
CERTIFICATES	67R-01
MAIN FEATURE	**POLYAMIDE INNER CORE REINFORCED WITH SINGLE BRAID IN TEXTILE YARN AND POLYURETHANE OUTER SHEATHING**

Also available in the “KIT” version comprising the following components.

- THERMOPLASTIC HOSE KIT
D.6 mm and D.8 mm “straight fitting”

6 meters of D.6 mm or D.8 mm thermoplastic hose
2x D.6 mm or D.8 mm straight fitting
2x D.6 mm or D.8 mm conical ring
2x D.6 mm or D.8 mm nut

- THERMOPLASTIC HOSE KIT
D.6 mm and D.8 mm “90° Elbow fitting”

6 meters of D.6 mm or D.8 mm thermoplastic hose
1x D.6 mm or D.8 mm straight fitting
1x D.6 mm or D.8 mm 90° elbow fitting 2x D.6 mm or D.8 mm conical ring
2x D.6 mm or D.8 mm nut

DATA SHEET

ACCESSORIES

NOZZLES

Brass calibrated nozzle for IG1, IG1 Apache, IG1 Apache HD, IG2 Metis, IG2 Namur II, IG7 Dakota, IG4 injectors

90° intake manifold nozzle for all types of sequential applications. Improves air and gas mixing efficiency and quality.

Long intake manifold nozzle. Suitable for large intake manifolds and for MAP tapping points

FITTINGS

Fitting for D.5 mm/6 mm rubber hoses, for M12x1 MAP tapping point. For IG1, IG1 Apache, IG1 Apache HD and IG7 Dakota injectors

Y branch in thermoplastic resin for D.5 mm/10 mm/12 mm hoses

Wired cable L=500 mm with male connector, AMP Superseal blade receptacle for connecting injector coils

M12x1 gas inlet connector for D.10 mm hose; for IG1, IG1 Apache, IG1 Apache HD and IG7 Dakota injectors

M12x1 adapter for Sensata pressure and temperature sensor; for IG1, IG1 Apache, IG1 Apache HD and IG7 Dakota injectors

M12x1 gas inlet connector for D.12 mm hose; for IG1, IG1 Apache, IG1 Apache HD and IG7 Dakota injectors

M12x1 gas inlet fitting for D.14 mm hoses; for IG1, IG1 Apache, IG1 Apache HD and IG7 Dakota injectors

SENSORS

Fitting for rubber hoses with D.5 mm or D.6 mm internal diameter for injector outlet pressure tapping point. With integrated NTC 4.7 kOhm temperature sensor for IG1, IG1 Apache, IG1 Apache HD and IG7 Dakota injectors

Fitting for rubber hoses with D.5 mm or D.6 mm internal diameter for injector outlet pressure tapping point. With integrated NTC 4.7 kOhm temperature sensor and AMP connector for IG1, IG1 Apache, IG1 Apache HD and IG7 Dakota injectors

Fitting for rubber hoses with D.5 or D.6 mm internal diameter for injector outlet pressure signal tapping point. With integrated NTC 4.7 kOhm temperature sensor and SICMA II connector for IG1, IG1- IG1 Apache HD and IG7 Dakota injectors

M5 NTC 4.7 kOhm temperature sensor with stripped wires for IG1, IG1 Apache, IG1 Apache HD and IG7 Dakota injectors

M5 NTC 4.7 kOhm temperature sensor with AMP connector for IG1, IG1 Apache, IG1 Apache HD and IG7 Dakota injectors

M5 NTC 4.7 kOhm temperature sensor with SICMA II connector for IG1, IG1 Apache, IG1 Apache HD and IG7 Dakota connectors

Sensata AMP Micro temperature and pressure sensor

AMP wired cable L=230 mm for Sensata sensor

ACCESSORIES

BRACKETS

Fixing bracket

REPAIR KIT

Replacement kit for IG1 Old, IG1 Apache, IG1 Apache HD, IG2 Namur II and IG2 Metis 4 cylinder injectors comprising 4x complete mobile plungers, 4x springs and 4x O-ring sleeves.

Replacement kit for IG4, IG6, IG7 Dakota 1-cylinder injectors comprising 1x complete mobile plunger, 1x spring, 1x coil disk and 1x plastic bushing

Spare filter cartridge with O-rings for FG4 filters

MANIFOLD

Manifolds to use with IG2 Metis, IG2 Namur II and IG4 Dakota A.M. single injectors 12 mm diameter available.

ON SEAT CALIBRATOR

EXTRA ACCESSORIES

Hand tool for measuring injector stroke; for IG1, IG1 Apache, IG1 Apache HD, IG2 Namur II, IG2 Metis and IG7 Dakota injectors.

RAIL

HOLDIM group

railgroup.it
info@railgroup.it

Via A. Grandi, 16
42030 Vezzano sul Crostolo
Reggio Emilia (RE) - Italy

+39 0522 603801